

ABSTRACT:

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One or more embodiments of the [[The]] present invention [[is]] are aimed at a device for ships, in particular for multihull ships and high-speed multihull ships, making it possible to avoid obstacles, in particular obstacles submerged at low depth. By performing an early detection of the echoes originating from objects situated on the route of the ship, the device allows in particular the crew of the ship to make provisions to alter the heading so as to avoid these objects. In at least one the preferred embodiment, the device according to the invention comprises at least: two transmitters of acoustic waves spaced apart from one another and transmitting waves of distinct frequencies or of different waveforms, an acoustic receiver, whose reception band is suitable for the emission frequencies of the transmitters, means of processing of the received signals, these means making it possible to performing, through the echoes echoes received, a measurement of the difference of the propagation times of the waves transmitted by each of the transmitters as well as and a measurement of the differential Doppler frequency of the waves transmitted by each of the transmitters effect which affects each of the waves transmitted; these processing means thus determining from these measurements the position of a the an object having returned an echo. The device according to the invention is intended in particular for multihull ships and in particular for high-speed multihull ships.